

STORY BY COURTNEY SWYDEN

# Water Resources Training Program

ASSISTING WATER PROFESSIONALS ONE WORKSHOP AT A TIME

The Texas Water Resources Institute (TWRI), in cooperation with other agencies and experts, began the Water Resources Training Program in 2008 with one goal in mind: to help water professionals by developing and providing training courses that offer intensive hands-on instruction and answer questions about the latest technologies, computer modeling, and water management strategies.

Training courses are coordinated by TWRI in collaboration with Texas A&M University's Spatial Sciences Laboratory (SSL) and Zachry Department of Civil Engineering, the Texas AgriLife Blackland Research and Extension Center at Temple, and the Texas AgriLife Research and Extension Urban Solutions Center at Dallas.

TWRI leads the marketing and administration of these courses on water-related

geographic information systems, remote sensing technology, and computer simulation models. During the training program's introductory year, TWRI, collaborators, and more than 20 instructors within The Texas A&M University System offered 10 training courses across the state to more than 300 participants.

"The training program offers courses at competitive prices so that water professionals and students alike are able to participate in the various courses," said Dr. B.L. Harris, acting TWRI director.

Models such as the Water Rights Analysis Package (WRAP), Soil and Water Assessment Tool (SWAT), and the Agricultural Policy/Environmental eXtender (APEX) are taught in introductory and/or advanced training courses. Participants receive hands-on instruction and

on completion are able to apply what they learned to their situations.

"For example, after the SWAT workshop, participants can apply the learned principles and methods to a watershed of their choice with readily available data or their own data," said Dr. Raghavan Srinivasan, Texas A&M professor and SWAT workshop instructor.

"Dr. Srinivasan was very good with answering questions, very patient, and very knowledgeable," said an advanced SWAT workshop attendee. "Thank you again for this great training. We are very excited about the opportunities to use the [SWAT] model, and there is no better way to learn than from this workshop." The training program has grown rapidly, and in 2009, 27 training courses were offered, working with 41 instructors within the Texas





**DR. DAVE ROSGEN OF WILDLAND HYDROLOGY CONDUCTS FIELD EXERCISES IN WEST VERDE CREEK, LOCATED IN THE HILL COUNTRY STATE NATURAL AREA, DURING THE APPLIED FLUVIAL GEOMORPHOLOGY SHORT COURSE, ONE OF THE FIRST COURSES OFFERED BY THE TRAINING PROGRAM.**  
*PHOTO BY MEGAN MEIER*

A&M System to teach more than 800 water professionals about various water resources technologies. As the program expands, current courses are updated based on the needs and feedback of participants.

Dr. Ralph Wurbs, Texas A&M professor and WRAP workshop instructor, emphasized the importance of having each participant discuss what he or she hopes to learn from the training. "During the trainings, I like to learn who the participants are and where they are in their knowledge with the model," he said. "This helps me to cater the workshop to them based on their needs."

In other training programs, TWRI works with Texas AgriLife Research, the Texas AgriLife Extension Service, state and federal agencies, and other universities to conduct training programs in watershed

protection planning. The Texas Watershed Planning Short Course, funded by the U.S. Environmental Protection Agency (EPA) through the Texas Commission on Environmental Quality, provides training and promotes sustainable approaches to managing water quality throughout the state.

This course provides guidance on stakeholder coordination and education and outreach. It meets the EPA's nine key elements of a watershed protection plan, data collection and analysis, and tools available for plan development.

A Texas Watershed Planning Short Course attendee said, "Great job, AgriLife folks! Thank you for all your hard work putting this course together in a condensed version while retaining essential pieces."

After completing the short course, participants are invited to attend the biannual

Texas Watershed Coordinator Roundtables to discuss current issues and updates on watershed protection plans and strategies for successful implementation, as well as answer questions and address concerns.

Additional workshops, including Getting In Step and the Key EPA Internet Tools Course, are offered free to watershed coordinators with outreach campaigns to stakeholders.

TWRI develops curriculum materials, handles logistics, and administers continuing education credits. Faculty and staff can focus on model development and training as TWRI assumes a greater role in administering these courses.

For more information about the Water Resources Training Program or to see a list of upcoming courses, visit [watereducation.tamu.edu](http://watereducation.tamu.edu).